



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,801	04/06/2001	Murali Rajagopalan	5222-033-RE	5361

79175 7590 07/19/2010  
HANIFY & KING PROFESSIONAL CORPORATION  
1055 Thomas Jefferson Street, NW  
Suite 400  
WASHINGTON, DC 20007

EXAMINER
----------

CHEN, VIVIAN

ART UNIT	PAPER NUMBER
----------	--------------

1787

MAIL DATE	DELIVERY MODE
-----------	---------------

07/19/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/827,801	<b>Applicant(s)</b> RAJAGOPALAN, MURALI	
	<b>Examiner</b> Vivian Chen	<b>Art Unit</b> 1787	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-22 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-2, 5-6, 10/1, 11/1, 11/5, 12-13, 15-16, 17/5, 18-22, 24-26 is/are allowed.
- 6) ☒ Claim(s) 3, 4, 6, 7/1, 7/3, 8/7, 9/7, 10/3, 11/3, 17/3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1787

# **DETAILED ACTION**

1. Claims 14, 23 have been cancelled by Applicant.

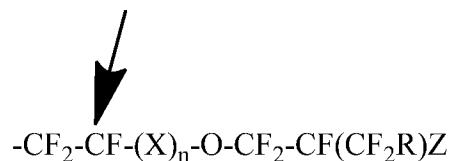
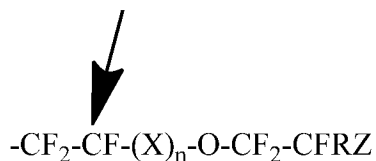
## ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

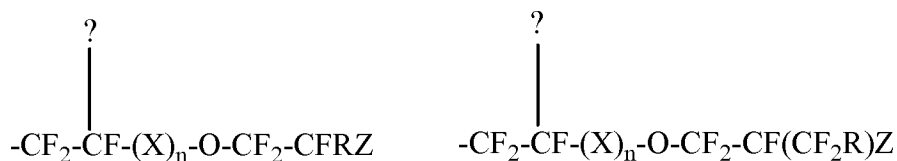
3. Claims 3, 4, 6, 7/1, 7/3, 8-9, 10/3, 11/3, 17/3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is vague and indefinite because in the first and second molecular units, the second carbon from the left is missing a substituent or a bond. Said carbon (e.g., as denoted by the arrows in the first formula and the second formula) is only bonded to three atoms -- i.e., a first bond to the leftmost carbon atom, a second bond to one fluorine atom, and a third bond to the first oxygen atom in a series of ether groups as specified by X -- and not four atoms, as required for carbon atoms. In the first and second formulae in the claim, the fourth bond for the second carbon from the left is not specified.



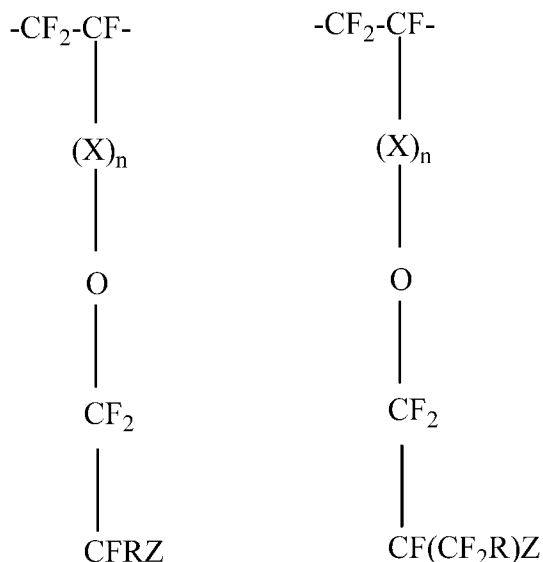
Art Unit: 1787

Claim 10 is vague and indefinite because it is unclear whether the first and second molecular units are supposed to be pendent groups hanging from a carbon backbone or terminal groups at the end of the carbon chain. The third recited molecular unit is clearly a terminal group because it has only one available bond. However, it is unclear from the first and second molecular units as depicted whether the specified molecular units are terminal or pendent units. If the first and second molecular units are meant to be terminal groups at the end of the carbon chain, then the chemical formulae for the first and second molecular units are unclear and confusing because the substituent on the second from the leftmost carbon atom is not specified -- i.e., the vertical bond line apparently connects with another unidentified substituent group (as denoted by the question marks in the formulae below) that was somehow omitted from the claim.



**However,** if the first and second molecular units are meant to be pendant groups hanging off the carbon backbone of the fluoropolymer, then it should be made clear by using a chemical formula which more clearly represents the molecular units' relationship to the carbon backbone of the fluoropolymer (e.g., see the polymeric formula of claim 7 and see below), especially given that the disclosure as originally filed discloses both pendant and terminal functional groups in the disclosed fluoropolymers.

Art Unit: 1787



Claim 7 is vague and indefinite because it currently contains two different chemical formulas for the claimed fluoropolymer -- i.e., the first formula is not properly marked with brackets to indicate deletion.

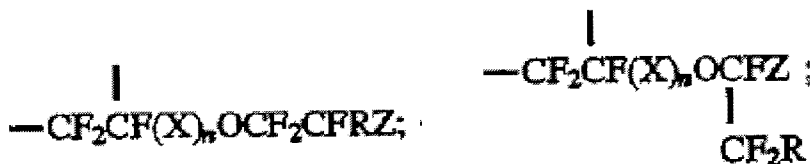
### *Response to Arguments*

4. Applicant's arguments filed 5/4/2010 with respect to MORGAN ET AL and CHAPMAN, Jr. ET AL have been fully considered and are persuasive. The rejections under 35 U.S.C. 103(a) have been withdrawn.

5. Applicant's arguments filed 5/4/2010 have been fully considered but they are not persuasive.

(A) Applicant argues that the amendments to claims 3, 10 have overcome the rejections under 35 U.S.C. 112, second paragraph, with respect to the first and second molecular units:

Art Unit: 1787



However, the Examiner notes that contrary to Applicant's statements, only the chemical formulae in claim 3 was amended (the formulae in claim 10 are unchanged), therefore rendering claims 3 and 10 inconsistent. Furthermore, the amendments to claim 3 raise new issues under 35 U.S.C. 112, second paragraph (see above).

The Examiner notes that the Amendments to the claims filed 5/4/2010 contain significant errors, including failure to clearly mark deletions, etc. -- e.g., claim 7.

The Examiner also cautions against the introduction of new matter. Any amendments made to correct the outstanding rejections under 35 U.S.C. 112, second paragraph, must be supported by the disclosure as originally filed.

#### *Allowable Subject Matter*

6. Claims 1-2, 5-6, 10/1, 11/1, 11/5, 12-13, 15-16, 17/5, 18-22, 24-26 are allowed over the prior art of record.

Art Unit: 1787

7. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to disclose a golf ball wherein: (a) the cover layer of the golf ball comprises the recited functionalized fluoropolymer (claim 1); (b) both at least one coating layer and the cover layer of the golf ball comprises the recited functionalized fluoropolymer (claim 5); (c) the cover layer of the golf ball comprises the recited functionalized fluoropolymer terpolymer (claim 6); (d) a method utilizes the recited functionalized terpolymer fluoropolymer to form the cover layer of golf ball (claim 18); (e) a method utilizes the recited functionalized terpolymer fluoropolymer terpolymer to form the cover layer of golf ball (claim 22); (f) the cover layer of the golf ball is covered with a coating comprising the recited functionalized fluoropolymer terpolymer (claim 25); (g) both at least one coating layer and the cover layer of the golf ball comprises the recited functionalized fluoropolymer terpolymer (claim 26). MORGAN ET AL and CHAPMAN, Jr. ET AL fail to disclose golf balls wherein the recited functional fluoropolymer forms a layer which is a structural element of the ball.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Art Unit: 1787

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho, can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 12, 2010

/Vivian Chen/

Primary Examiner, Art Unit 1787